

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Canceled)

2. (Currently amended) A receiver including:

an input unit which inputs a plurality of signals on which a processing is to be performed;

a switching unit which switches a plurality of weighting coefficients by which the plurality of inputted signals are multiplied between a plurality of first weighting coefficients and a plurality of second weighting coefficients;

a controller which instructs the switching unit to switch the weighting coefficients from the plurality of first weighting coefficients to the plurality of second weighting coefficients in a prescribed interval; [[and]]

a synthesizer which synthesizes results of multiplications, where the multiplications are performed on the plurality of inputted signals and the plurality of weighting coefficients[[,]]; wherein

a weighting coefficient updating unit which updates a plurality of third weighting coefficients adaptively based on the plurality of inputted signals;

a gap estimator which estimates gaps between the plurality of first weighting coefficients and the plurality of third weighting coefficients by performing correlation processing between at least one of the plurality of inputted signals and a known signal; and

a gap compensator which generates the plurality of second weighting coefficients by compensating the plurality of third weighting coefficients based on the estimated gaps, wherein

the signals input in the input unit are burst signals, [[and]]

the controller requests the switching of the plurality of weighting coefficients in the middle of a burst signal, and

the plurality of third weighting coefficients in the weighting coefficient updating unit and the plurality of second weighting coefficients in the gap compensator are not derived by updating the plurality of first weighting coefficients.

3. (Original) A receiver according to Claim 2, wherein the plurality of first weighting coefficients is set in a manner that, as results of multiplications by the plurality of inputted signals, a multiplication result corresponding to one signal among the plurality of inputted signals becomes effective.

4. (Original) A receiver according to Claim 3, wherein the one signal among the plurality of inputted signals is a signal having a largest value among the plurality of inputted signals.

5. (Previously presented) A receiver according to Claim 2, wherein the plurality of first weighting coefficients is set by utilizing the plurality of second weighting coefficients used in the past for multiplication by the synthesizer.

6. (Canceled)

7. (Canceled)

8. (Currently amended) A receiver according to Claim [[6]] 2, wherein the controller inputs sequentially the plurality of third weighting coefficients updated in the weight coefficient updating unit and instructs the switching unit to switch the weighting coefficients between the first weighting coefficients and the second weighting coefficients when fluctuation of the plurality of third weighting coefficients converges within a prescribed range.

9. (Canceled)

10. (Currently amended) A receiving method, including:
inputting a plurality of signals on which a processing is to be performed;
switching a plurality of weighting coefficients by which the plurality of inputted signals are multiplied between a plurality of first weighting coefficients and a plurality of second weighting coefficients;
giving an instruction of switching the weighting coefficients from the plurality of first weighting coefficients to the plurality of second weighting coefficients; [[and]]
synthesizing results of multiplications, where the multiplications are performed on the plurality of inputted signals and the plurality of weighting coefficients[[.,]];
updating a plurality of third weighting coefficients adaptively based on the plurality of inputted signals;

estimating gaps between the plurality of first weighting coefficients and the plurality of third weighting coefficients by performing correlation processing between at least one of the plurality of inputted signals and a known signal; and

generating the plurality of second weighting coefficients by compensating the plurality of third weighting coefficients based on the estimated gaps, wherein

the signals to be input are burst signals, [[and]]

the switching between the plurality of first weighting coefficients and the plurality of second weighting coefficients is requested in the middle of a burst signal, and

the plurality of third weighting coefficients in the updating step and the plurality of second weighting coefficients in the generating step are not derived by updating the plurality of first weighting coefficients.

11. (Original) A receiving method according to Claim 10, wherein the plurality of first weighting coefficients is set in a manner that, as results of multiplications by the plurality of inputted signals, a multiplication result corresponding to one signal among the plurality of inputted signals becomes effective.

12. (Original) A receiving method according to Claim 11, wherein the one signal among the plurality of inputted signals is a signal having a largest value among the plurality of inputted signals.

13. (Previously presented) A receiving method according to Claim 10, wherein the plurality of first weighting coefficients may be set by utilizing the plurality of second weighting coefficients used in the past for multiplication in the synthesizing.

14. (Canceled)

15. (Canceled)

16. (Currently amended) A receiving method according to Claim ~~[[14]]~~ 10, wherein the plurality of third weighting coefficients updated is inputted sequentially in giving the instruction of switching the weighting coefficients between the first weighting coefficients and the second weighting coefficients, and the instruction is given when fluctuation of the plurality of third weighting coefficients converges within a prescribed range.

17. (Canceled)

18. (Currently amended) A ~~recording~~ computer readable storage medium encoded with a computer program for causing a computer to perform the steps of storing a program executable by a computer, the program including the modules for:

inputting a plurality of signals on which a processing is to be performed;

switching a plurality of weighting coefficients by which the plurality of inputted signals are multiplied between a plurality of first weighting coefficients and a plurality of second weighting coefficients;

giving an instruction of switching the weighting coefficients from the plurality of first weighting coefficients to the plurality of second weighting coefficients in a prescribed interval, where the plurality of signals are inputted in a sequential manner during the interval; [[and]]

synthesizing results of multiplications, where the multiplications are performed on the plurality of inputted signals and the plurality of weighting coefficients[[,]];

updating a plurality of third weighting coefficients adaptively based on the plurality of inputted signals;

estimating gaps between the plurality of first weighting coefficients and the plurality of third weighting coefficients by performing correlation processing between at least one of the plurality of inputted signals and a known signal; and

generating the plurality of second weighting coefficients by compensating the plurality of third weighting coefficients based on the estimated gaps, wherein

the signals to be input are burst signals, [[and]]

the switching between the plurality of first weighting coefficients and the plurality of second weighting coefficients is requested in the middle of a burst signal, and

the plurality of third weighting coefficients in the updating step and the plurality of second weighting coefficients in the generating step are not derived by updating the plurality of first weighting coefficients.

19. (Currently amended) A ~~recording~~ computer readable storage medium according to Claim 18, wherein the plurality of first weighting coefficients is set in a manner that, as results of multiplications by the plurality of inputted signals, a multiplication result corresponding to one signal among the plurality of inputted signals becomes effective.

20. (Currently amended) A ~~recording~~ computer readable storage medium according to Claim 19, wherein the one signal among the plurality of inputted signals is a signal having a largest value among the plurality of inputted signals.

21. (Currently amended) A ~~recording~~ computer readable storage medium according to Claim 18, wherein the plurality of first weighting coefficients may be set by utilizing the plurality of second weighting coefficients used in the past for multiplication in the synthesizing.

22. (Canceled)

23. (Canceled)

24. (Currently amended) A ~~recording~~ computer readable storage medium according to Claim ~~[[22]]~~ 18, wherein the plurality of third weighting coefficients updated is inputted sequentially in giving the instruction of switching the weighting coefficients between the first weighting coefficients and the second weighting coefficients, and the instruction is given when fluctuation of the plurality of third weighting coefficients converges within a prescribed range.

25. (New) The receiver according to claim 2, wherein
the gap estimator comprises:
a selector which selects one of the plurality of signals effective in an interval in which the plurality of first weighting coefficients are used;

a buffer which detects the start timing of a burst signal and outputs the signal selected by the selector at the start timing; and

a multiplier which estimates gaps by multiplying the signal output from the buffer by a known signal.

26. (New) The method according to claim 10, wherein the gap estimation comprises:
selecting one of the plurality of signals effective in an interval in which the plurality of first coefficients are used;

detecting the start timing of a burst signal and outputting the selected signal at the start timing; and

estimating gaps by multiplying the output signal by a known signal.

27. (New) The computer readable storage medium according to claim 18, wherein the gap estimation comprises:

selecting one of the plurality of signals effective in an interval in which the plurality of first coefficients are used;

detecting the start timing of a burst signal and outputting the selected signal at the start timing; and

estimating gaps by multiplying the output signal by a known signal.